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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,743	01/23/2002	Paul Miller	S63 2-9964	7373

490 7590 06/23/2004

VIDAS, ARRETT & STEINKRAUS, P.A.  
6109 BLUE CIRCLE DRIVE  
SUITE 2000  
MINNETONKA, MN 55343-9185

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/055,743	<b>Applicant(s)</b> MILLER ET AL	
	<b>Examiner</b> Sandra M. Nolan	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 5-25 is/are pending in the application.
- 4a) Of the above claim(s) 14-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-13 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 April 2004 has been entered.

### ***Claims***

2. Pursuant to entry of the amendment proposed in the 10 February 2004 response to the final rejection dated 10 December 2003, claims 1 and 5-25 are pending.

Claims 2-4 were cancelled. Claims 14-22 were withdrawn. Therefore, claims 1, 5-13 and 23-25 are treated here.

### ***Rejections Withdrawn***

3. All of the 35 USC 102 and 35 USC 103 rejections set out in sections 4 through 6 of the 10 December 2003 final rejection are withdrawn in order to apply the new grounds of rejection below.

### ***New Rejections***

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear to the examiner how tubes are combined via butt or lap joints after they are formed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1, 5, 8-13 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samuelson et al (US 6,165,166) in view of LaFleur et al (US-6,087,442).

Samuelson teaches medical tubing having outer, core and intermediate tie layers (abstract). The tubing is used in catheters (col. 8, lines 60-65 and col. 10, lines 4-56). The outer layer is polyester or polyamide (col. 6, lines 6-23). The core layer is

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polyethylene (col. 6, lines 38-54). The tie layer is made of a material that is capable of adhering outer layer to the core layer to resist delamination (col. 6, lines 55-63).

Polyethylene is a well-known polyolefin.

Its outer layer surrounds, and therefore overlaps, its core layer (Figure 1).

Samuelson fails to teach the use of blended polymer powders in its tie layers, which blends contain polymers having compatibility with its outer and core layers.

LaFleur teaches polymer blends (abstract) that can be powdered (col. 7, lines 12-15) and used as tie layers for multilayer articles (col. 7, lines 22-26).

The patents are analogous because they both deal with tie layers for multilayer systems.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ powders of the polymer blends of LaFleur as tie layers in the tubing of Samuelson in order to help prevent delamination.

The motivation to employ the blends of LaFleur as tie layers in the tubing of Samuelson is found at col. 6, lines 55-63 of Samuelson, where it teaches that delamination is resisted by adhesive layers between its outer and core layers, and at col. 7, lines 12-15 and 22-26 of LaFleur, where it teaches that its blends can be powdered and that they are useful tie layers in multilayer articles.

It is deemed beneficial to make medical tubing that resists delamination in order to improve the useful lives of the products containing it.

The selection of polymers blends whose components are compatible with the outer and core layers of Samuelson is an obvious matter of engineering choice, depending upon the delamination resistance desired.

***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 5-13 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is 571/272-1495. She can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.



S. M. Nolan  
Primary Examiner  
Technology Center 1700

SMN/smn  
10055743(20040616)